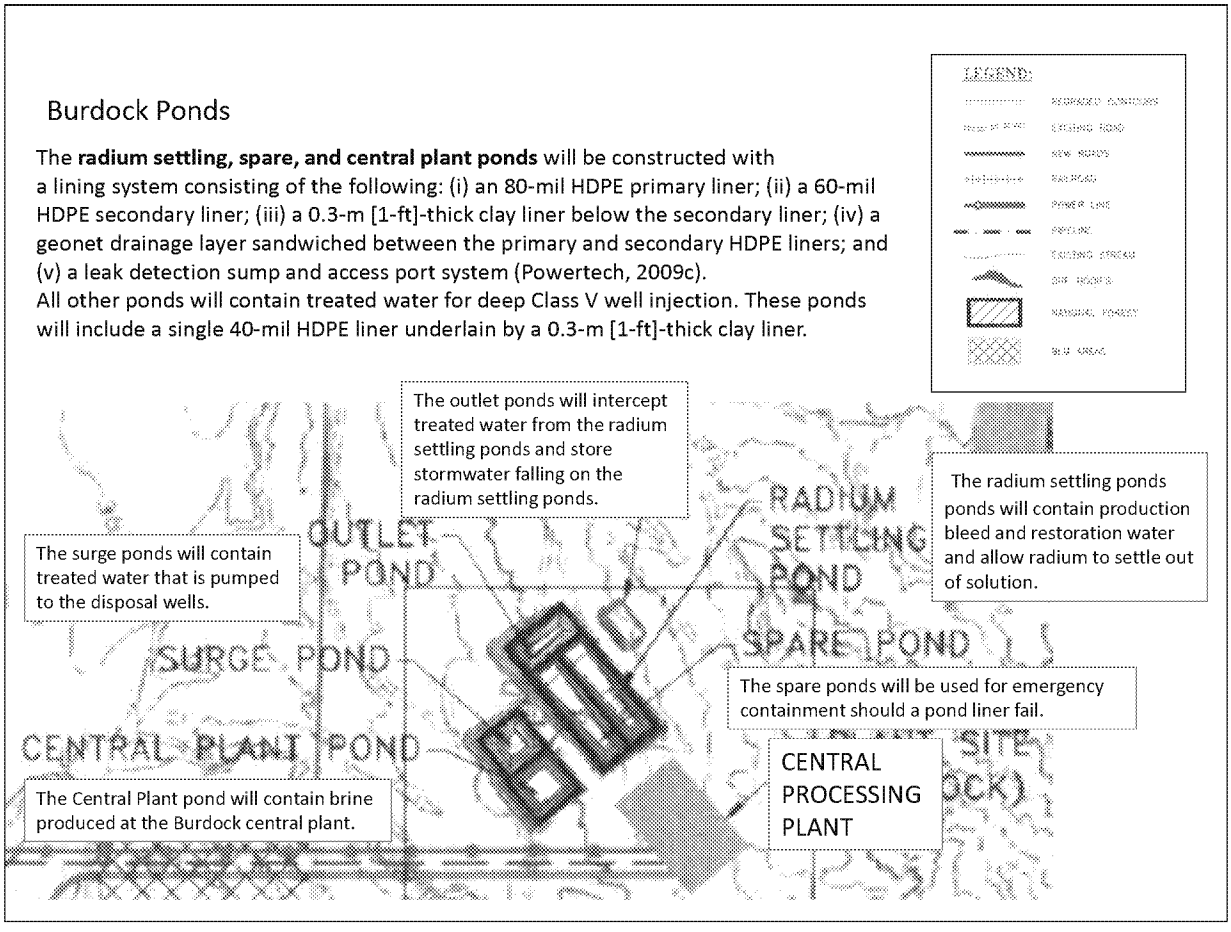
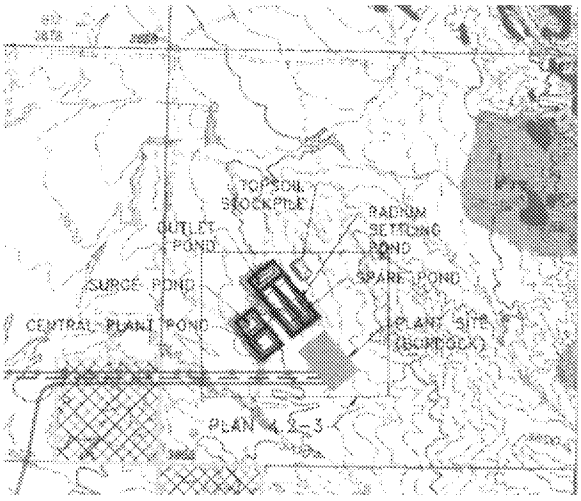
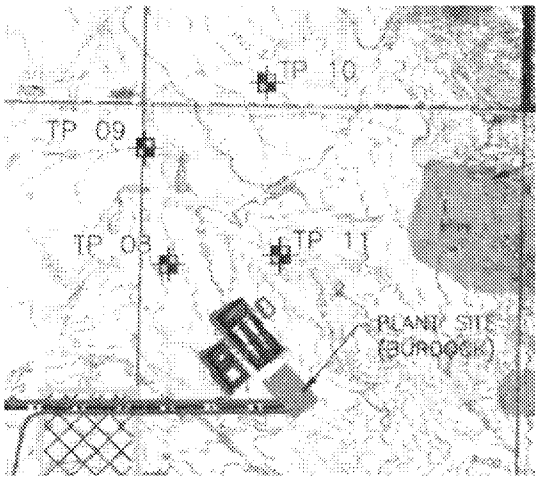
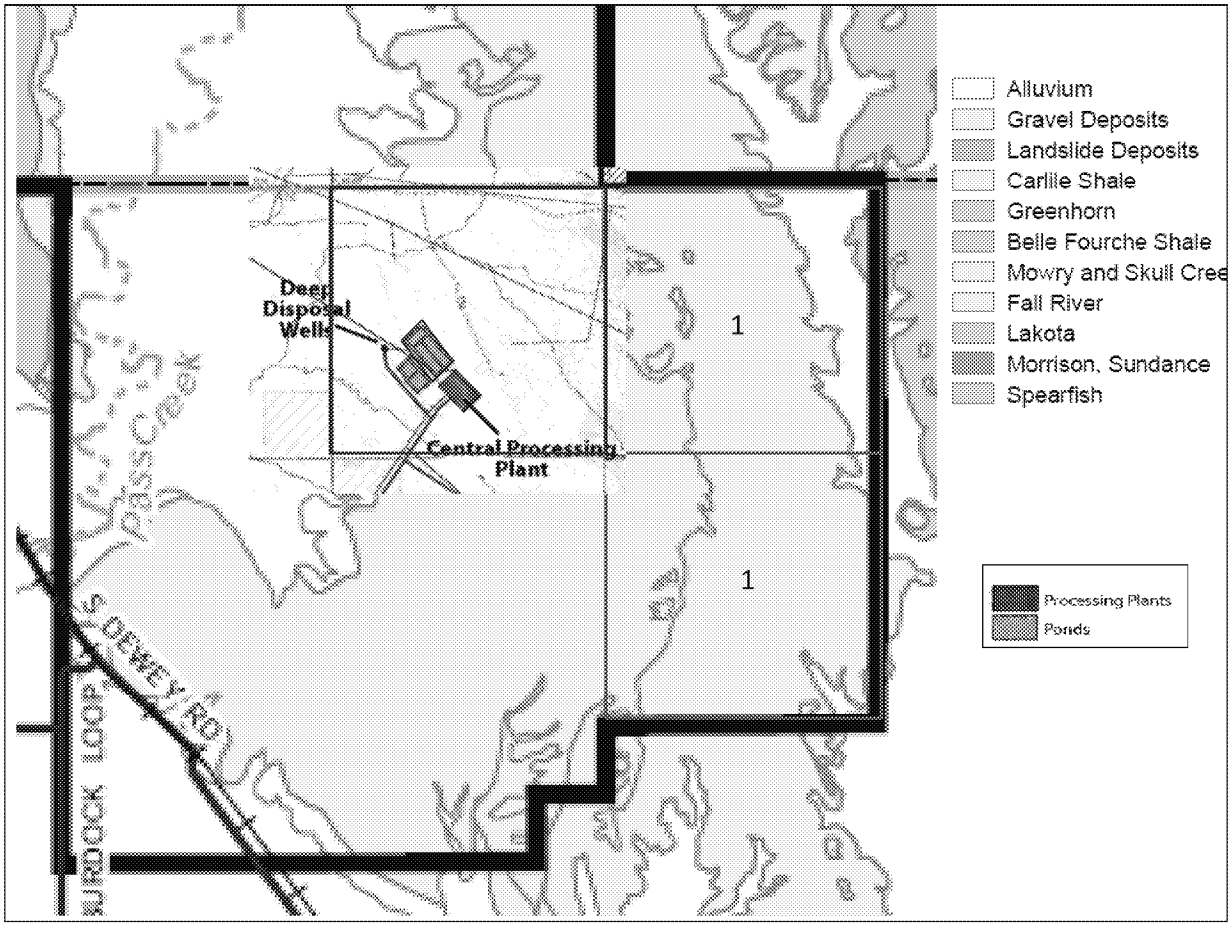


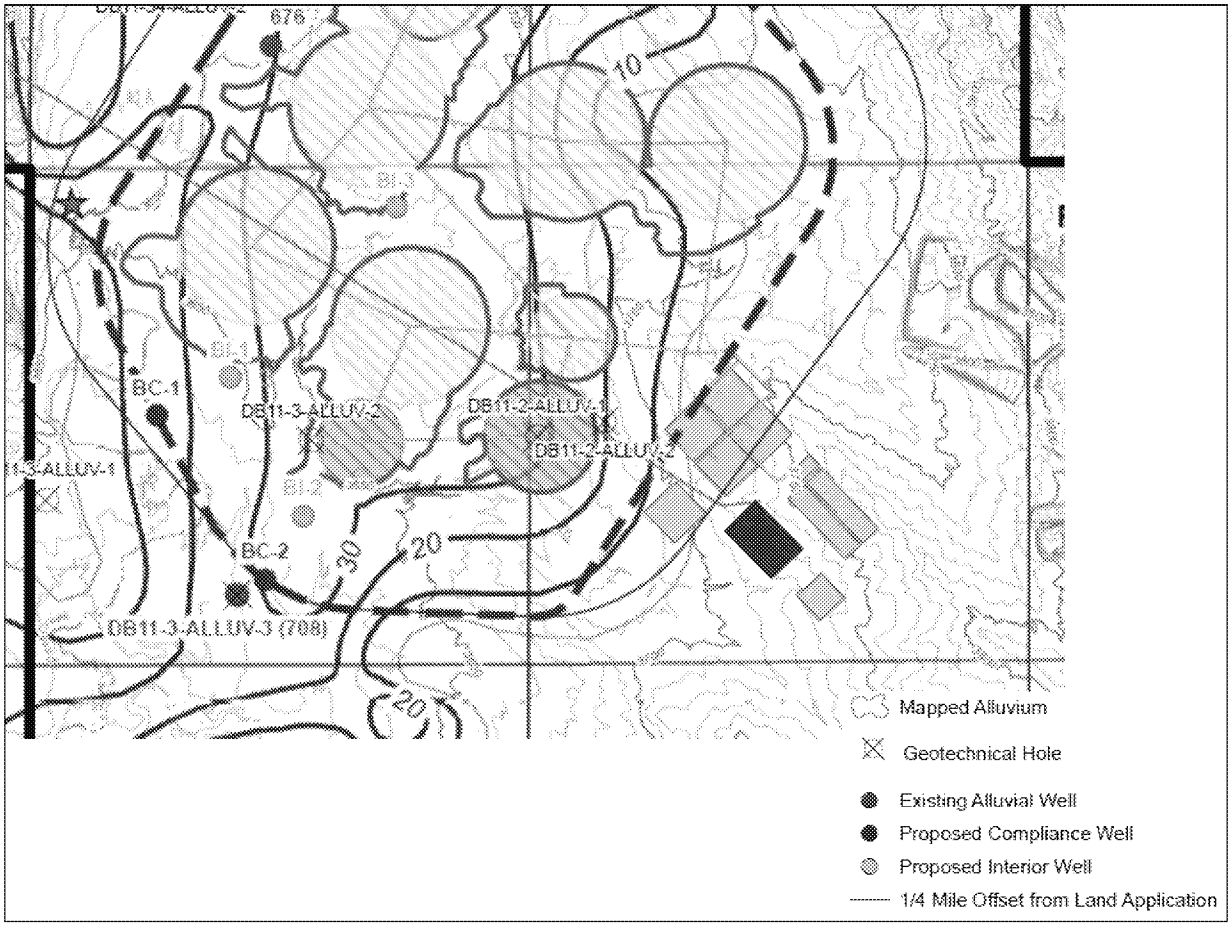
Burdock ponds: This slide has the different pond types labeled.
From Supplemental Report 2009, Appendix B Figure 4.6-1 DEEP WELL DISPOSAL SITE PLAN


TOPSOIL STOCKPILE
RADIUM SETTLING POND
OUTLET POND
SURGE POND
SPARE POND
CENTRAL PLANT POND
PLANT SITE (BURGOS)
PLAN 4 2-3


TP 10
TP 09
TP 08
TP 11
PLANT SITE (BURGOS)

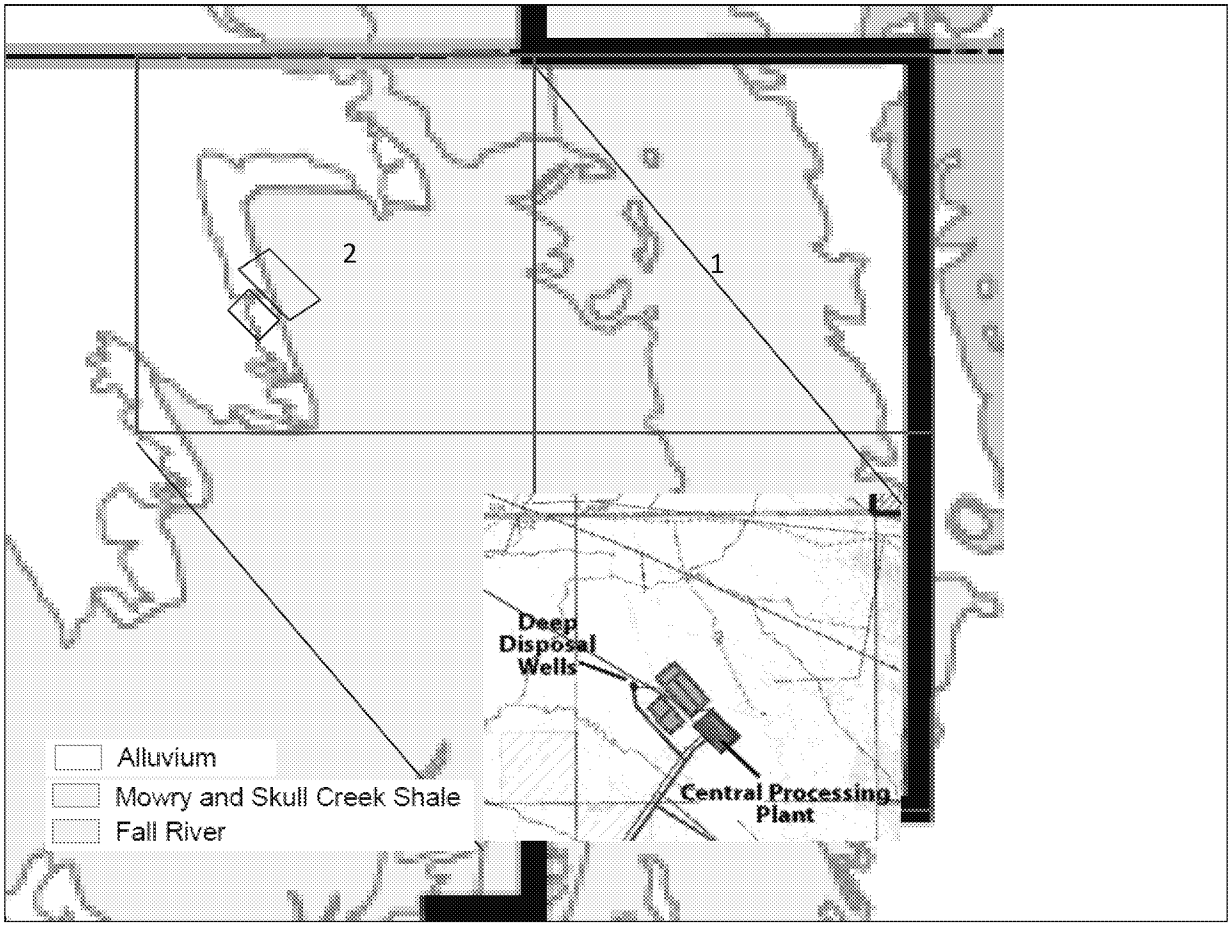


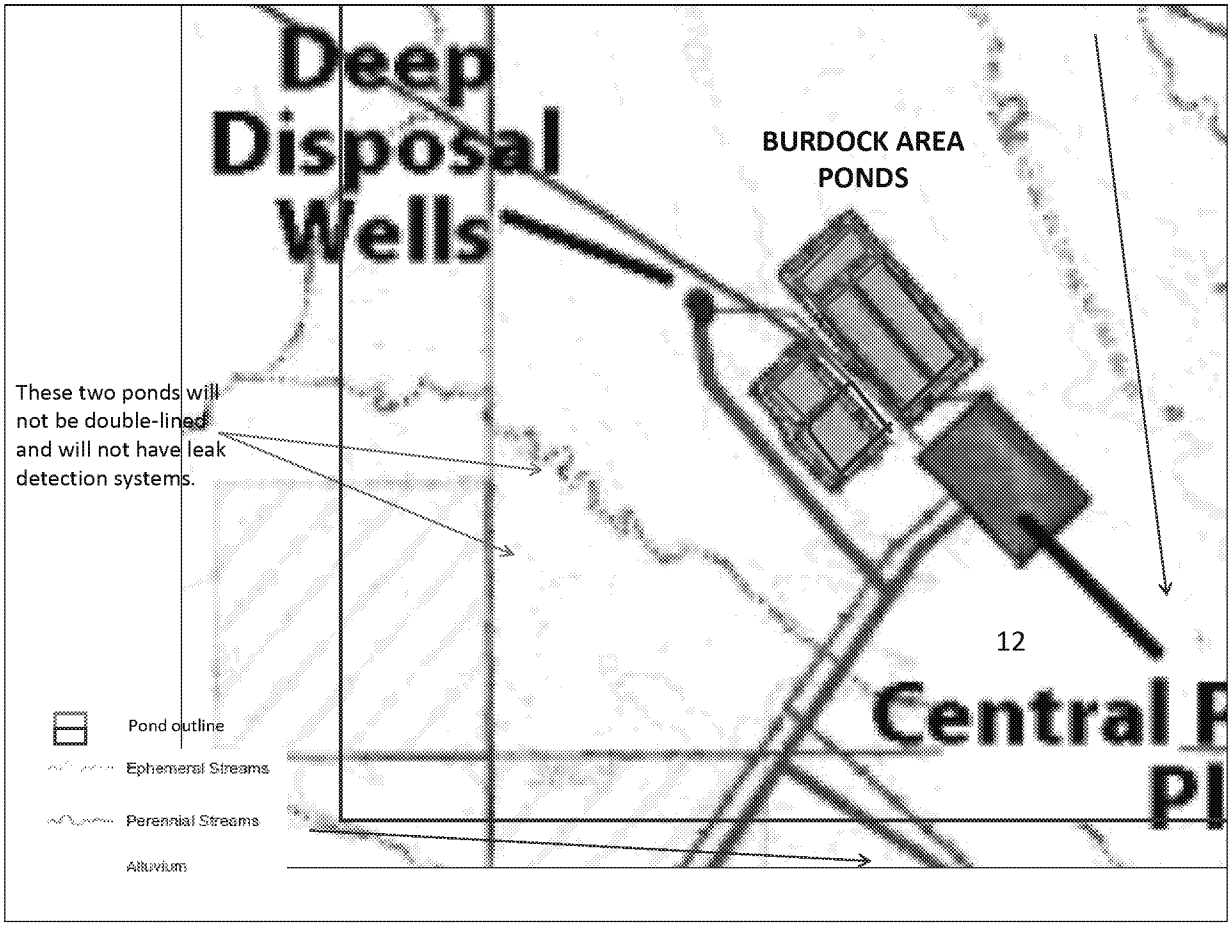
Burdock Area from Figure 6.3 Site Surface Geology from Class III permit application and the pond diagram from NRC Dewey Burdock SEIS
Figure 2.1-10. Location of Deep Injection Wells and Ponds



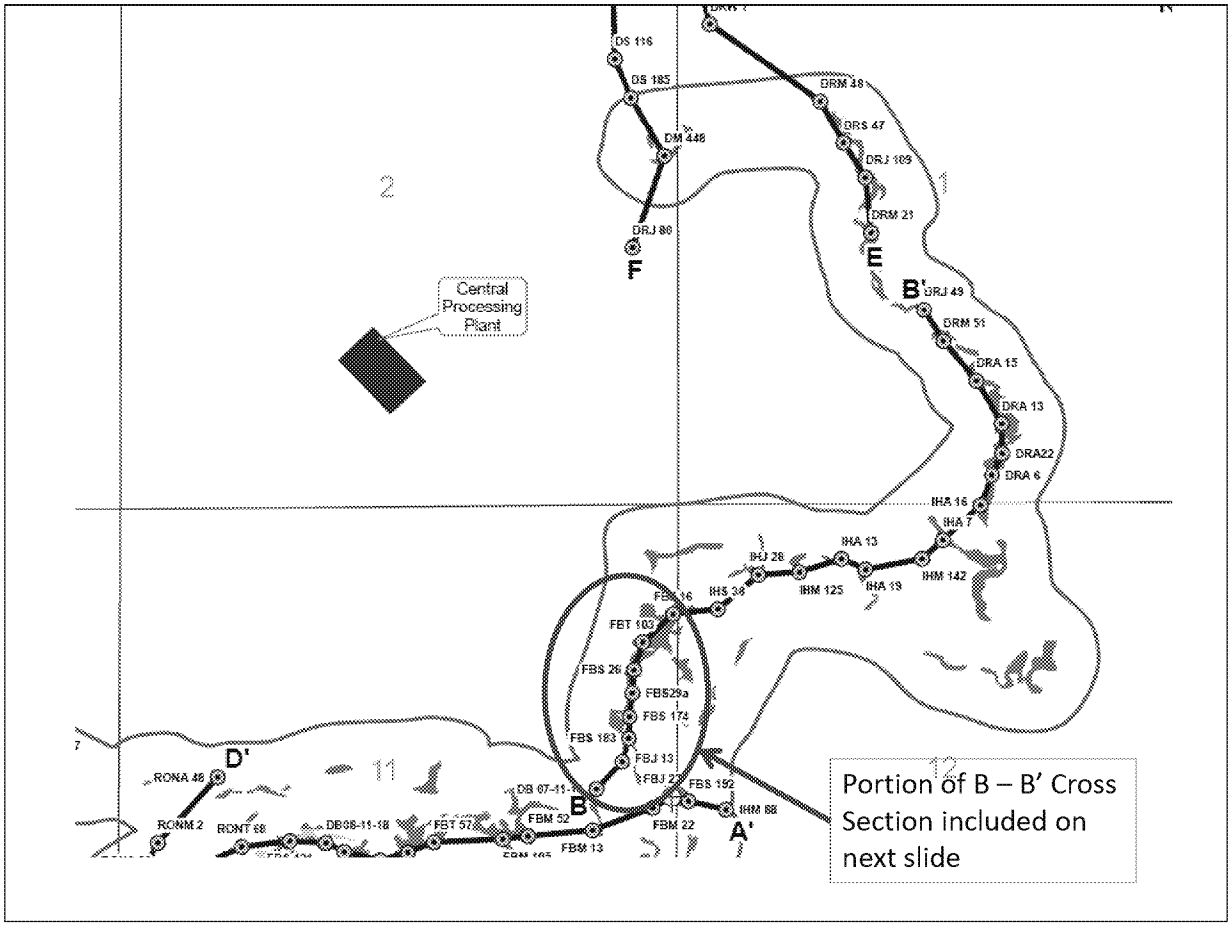
Nearest alluvial wells to Burdock Ponds
From Figure 6.1-2 Proposed Alluvial Monitor Wells Burdock Land Application Area DENR GW Discharge Permit App


Alluvium
Mowry and Skull Creek Shale
Fall River

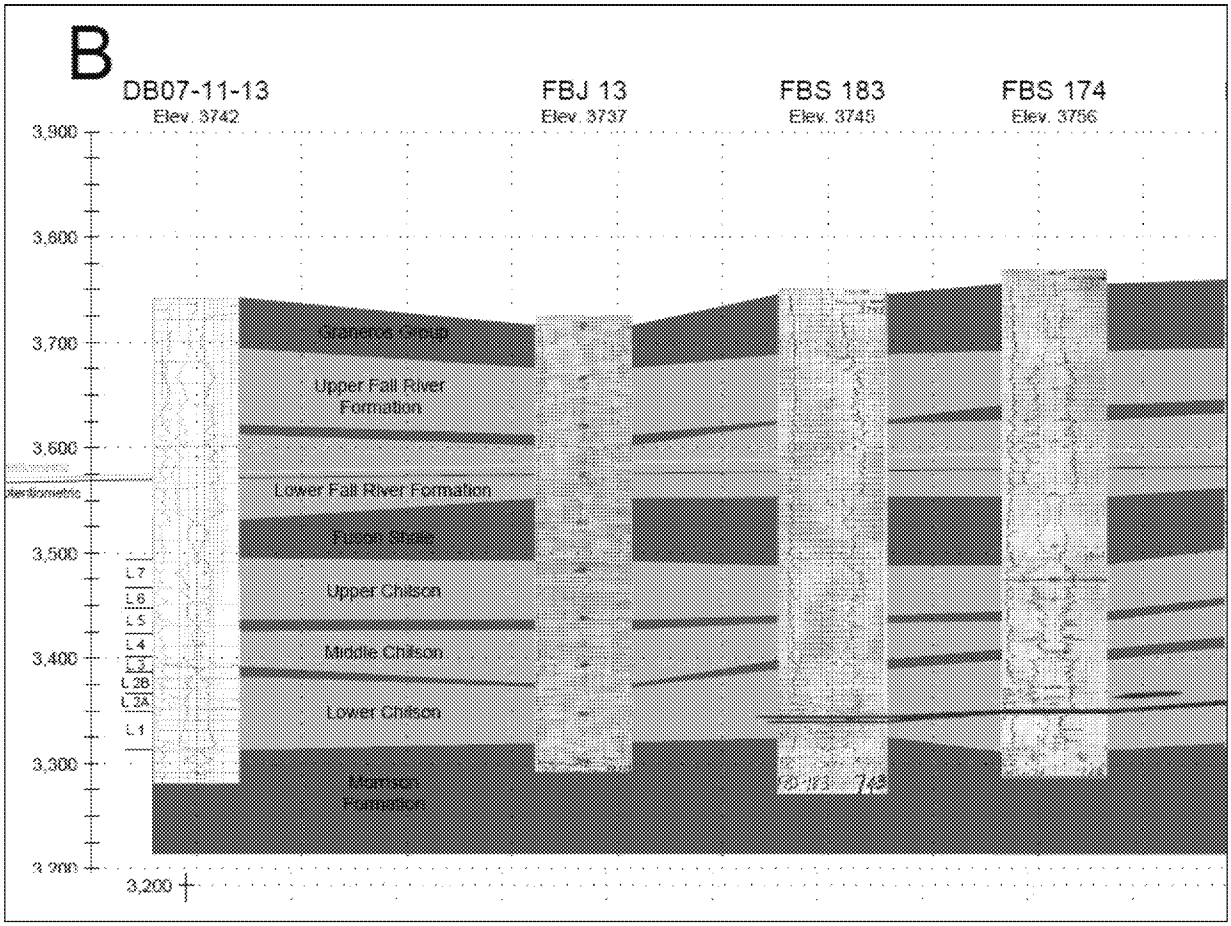

2
1
Deep
Disposal
Wells
Central Processing
Plant
Alluvium
Mowry and Skull Creek Shale
Fall River



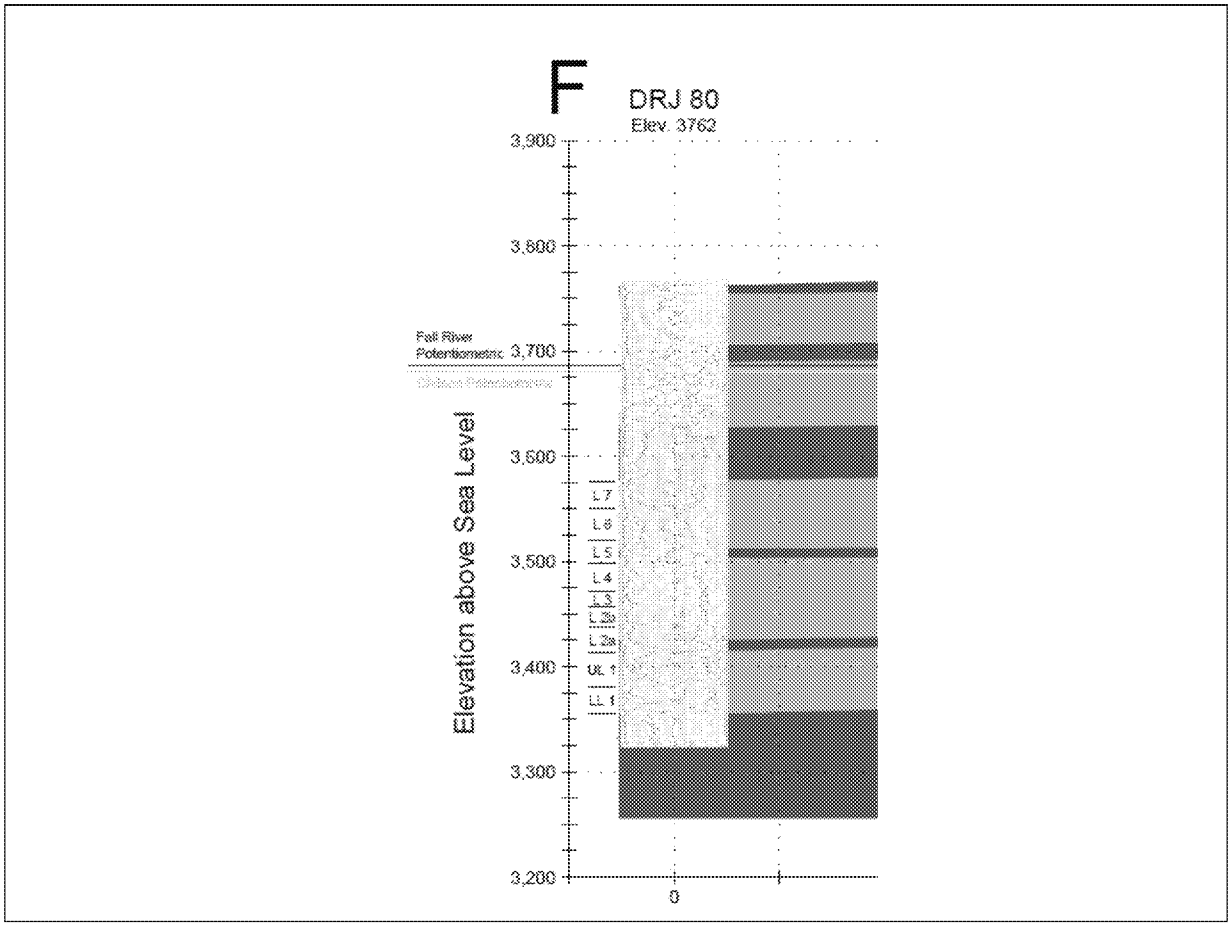
If you click on the pond map and move it to overlay Section 2, it is transparent while you are moving it. This allows you to see how the ponds line up with the outlines I have drawn. One pond is entirely in the alluvium and the other lies partly in the alluvium.



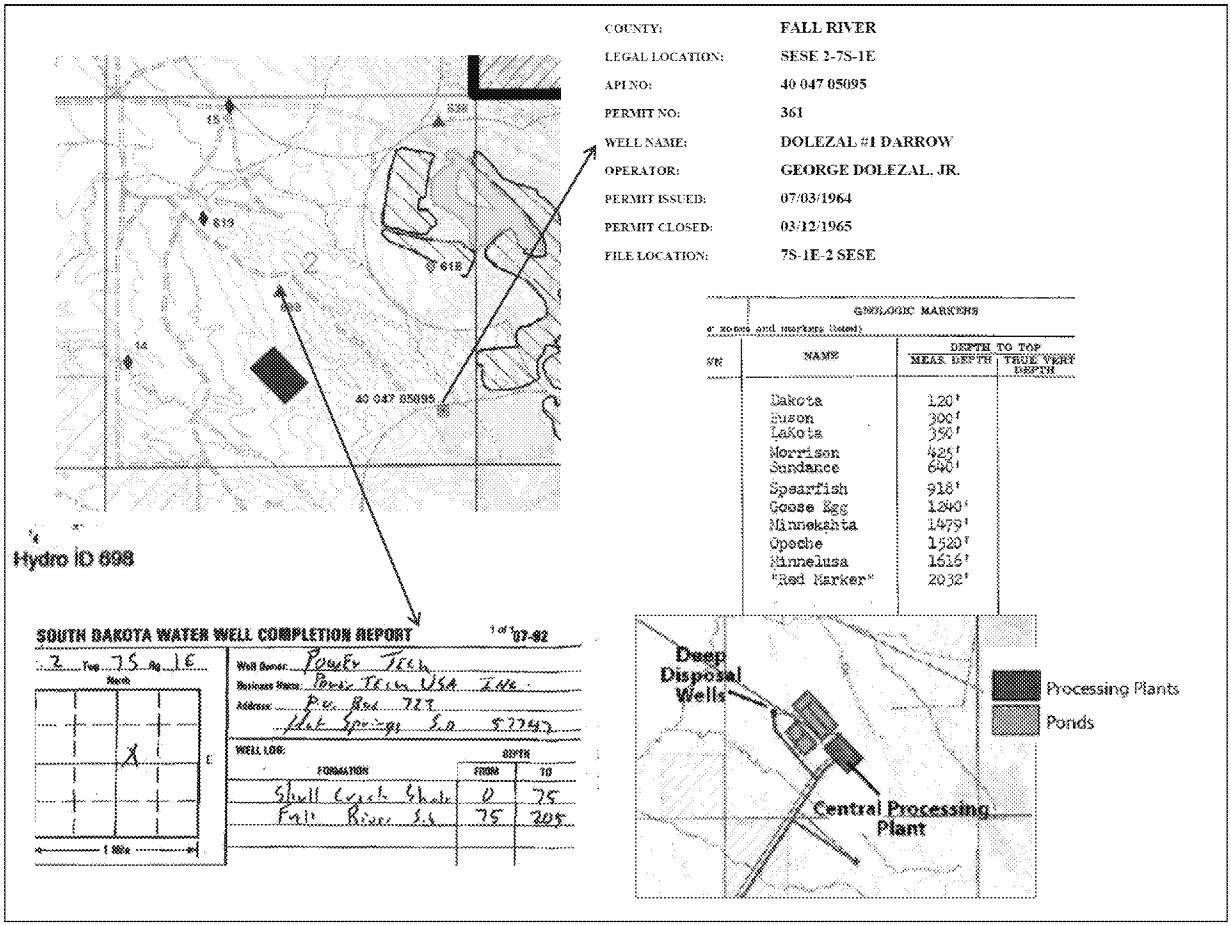
Location of well fields and cross sections in the Burdock area



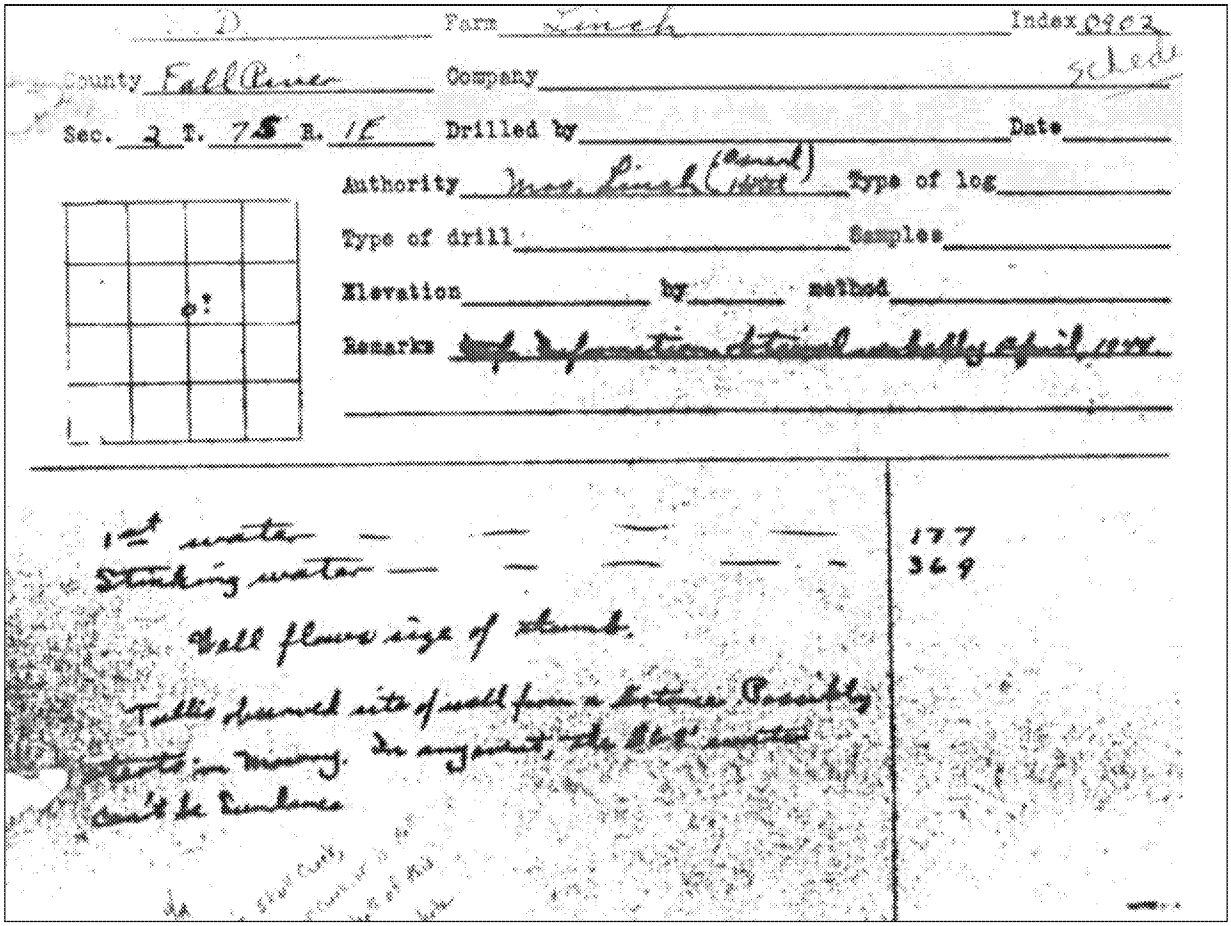
Portion of cross-section B – B’ approximately cross-dip from Burdock Ponds. There is more to the right off the slide.



DRJ 80 has less than 10 feet of shale.



Well log from Dolezal #1 Darrow shows top of Fall River (called Dakota) at 120 feet deep. But Powertech's well completion report for the monitoring well #698 shows 75 feet of Skull Creek (part of the Graneros Group of shales).
The logs for wells 14, 619 and 15 are not in the DENR well database. The Linch well is the only well that shows up in the DENR well database.



http://denr.sd.gov/des/wr/dblogs.aspx
The Linch well (info from the DENR well database) Well #698 is probably closer to the ponds.
SWNE Section 2 T7S R1E

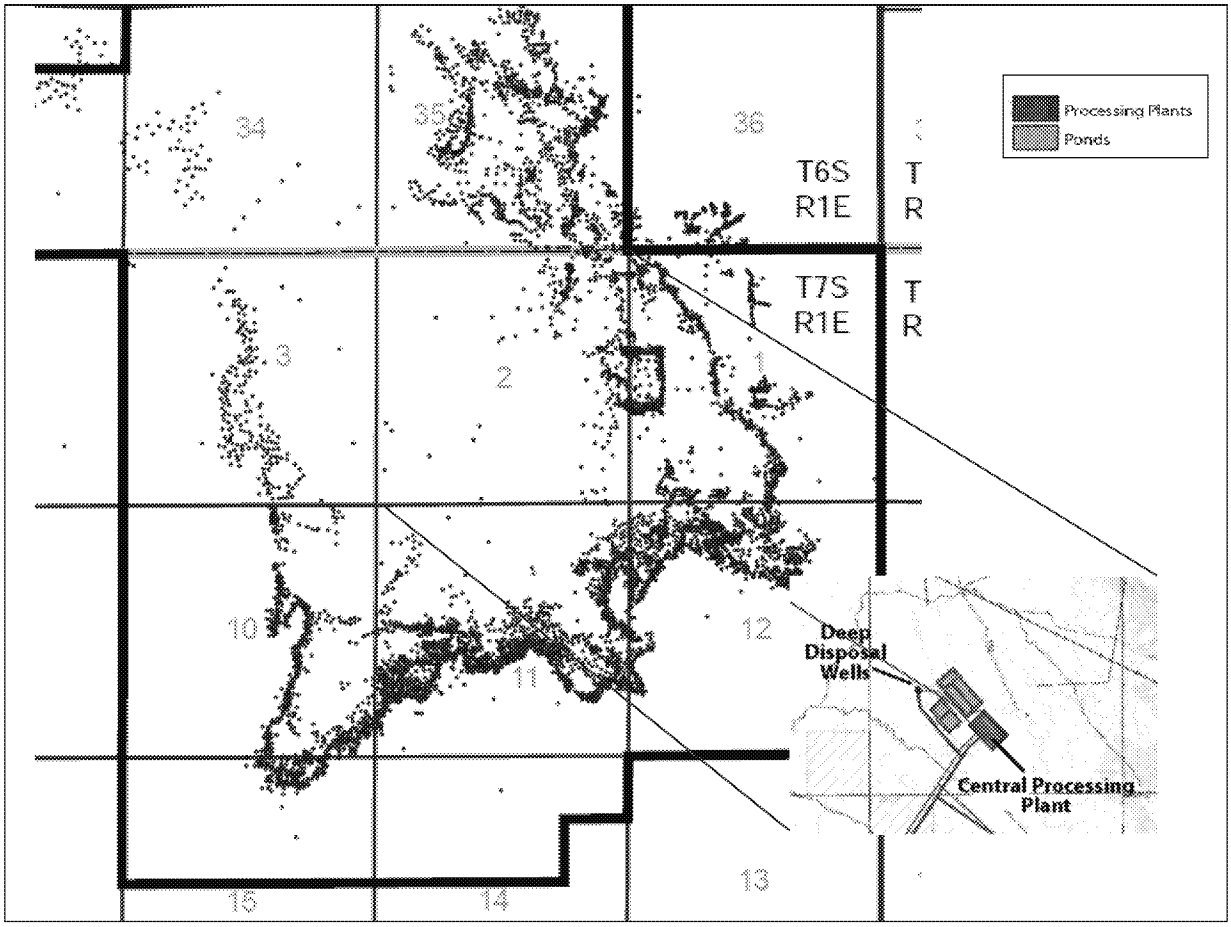
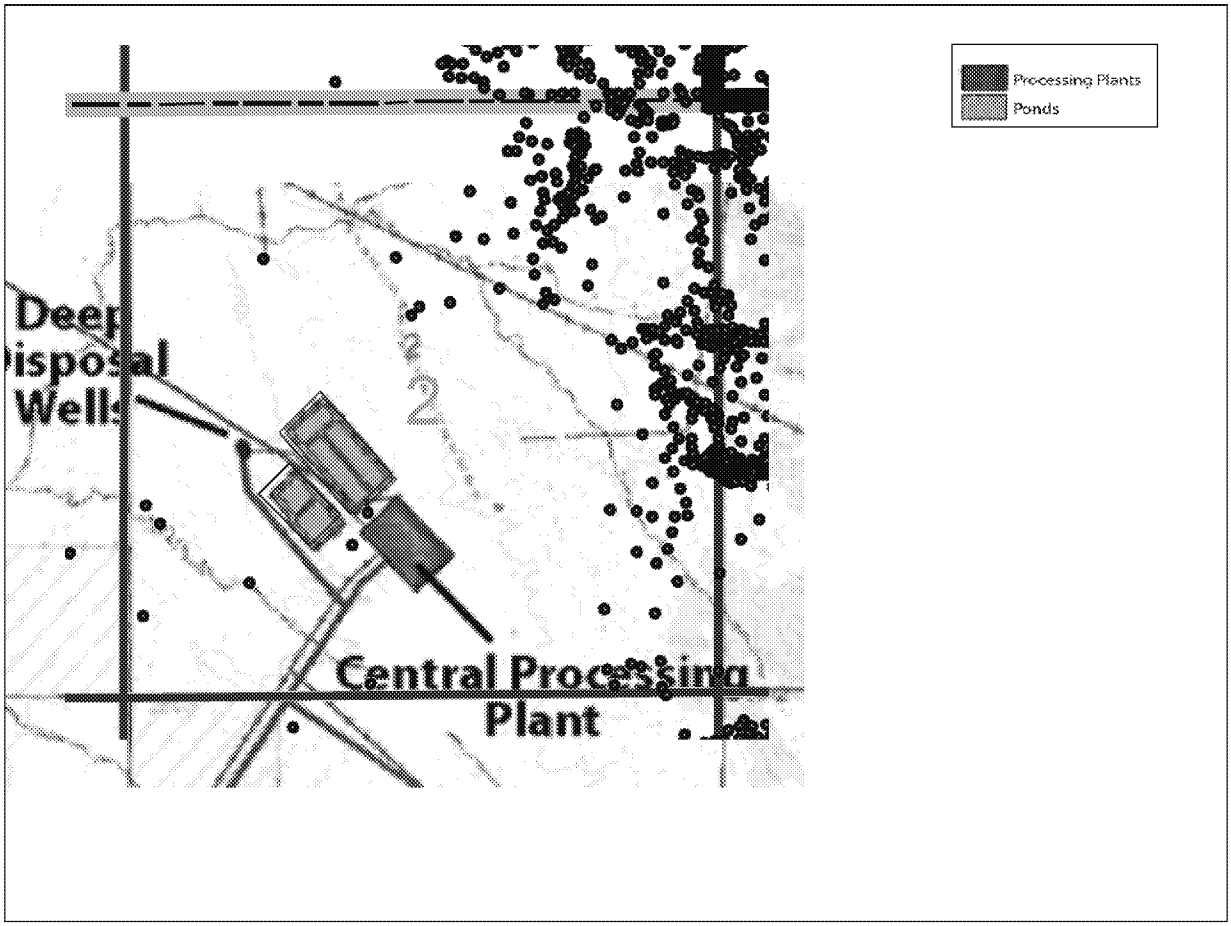
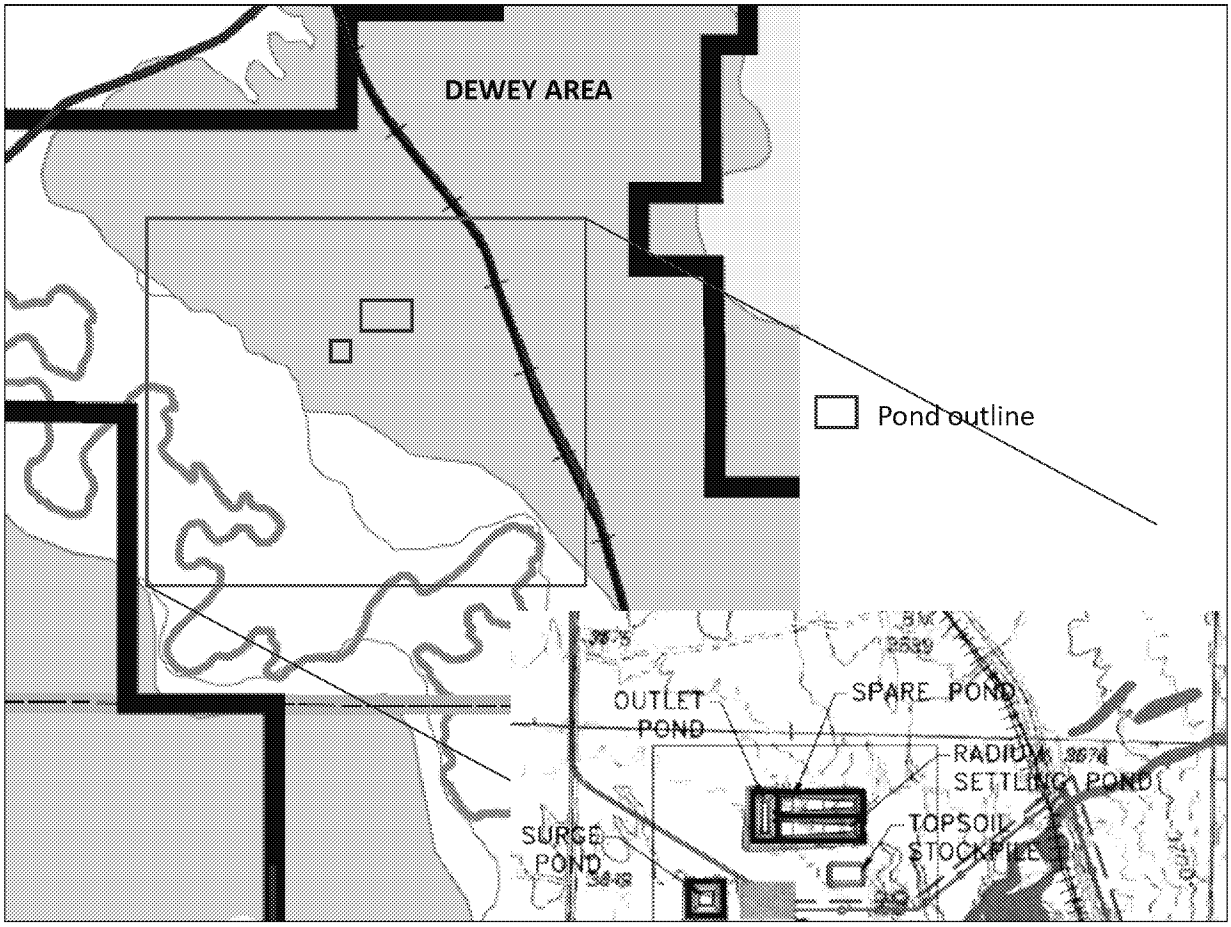


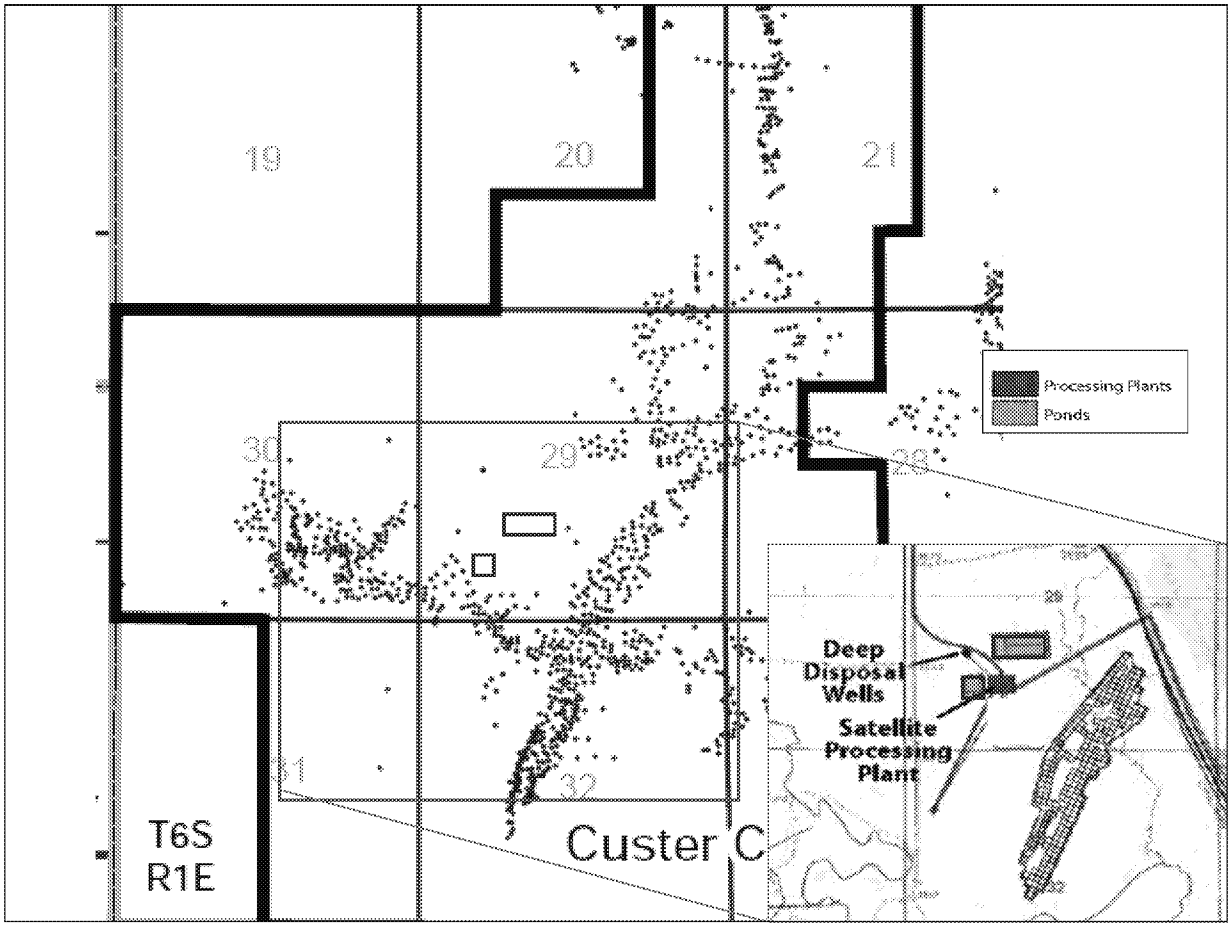
Figure 4.2: Dewey-Burdock Drill Hole Map from the Class III Permit Application
Burdock Area



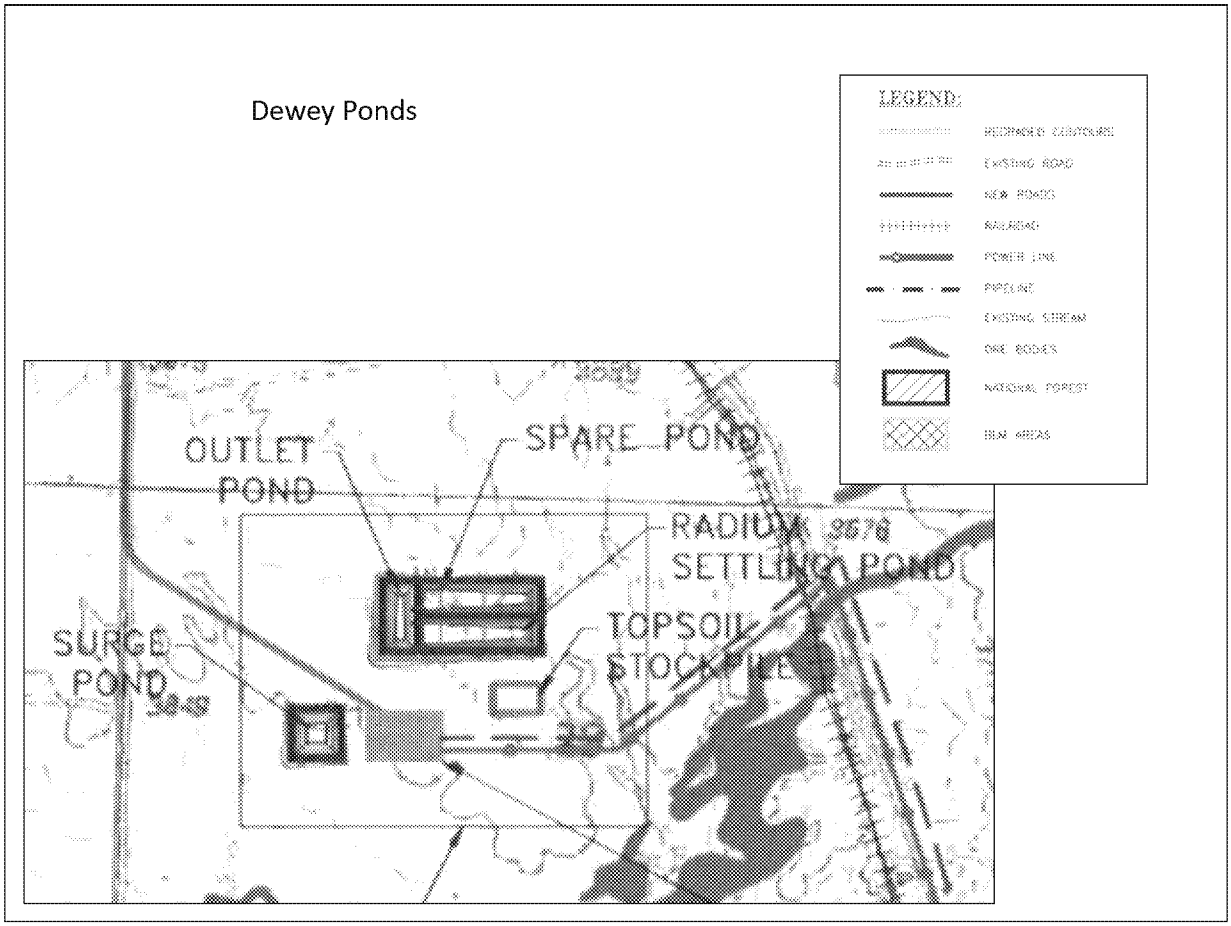
The Burdock ponds do not lie over any exploratory drill holes.



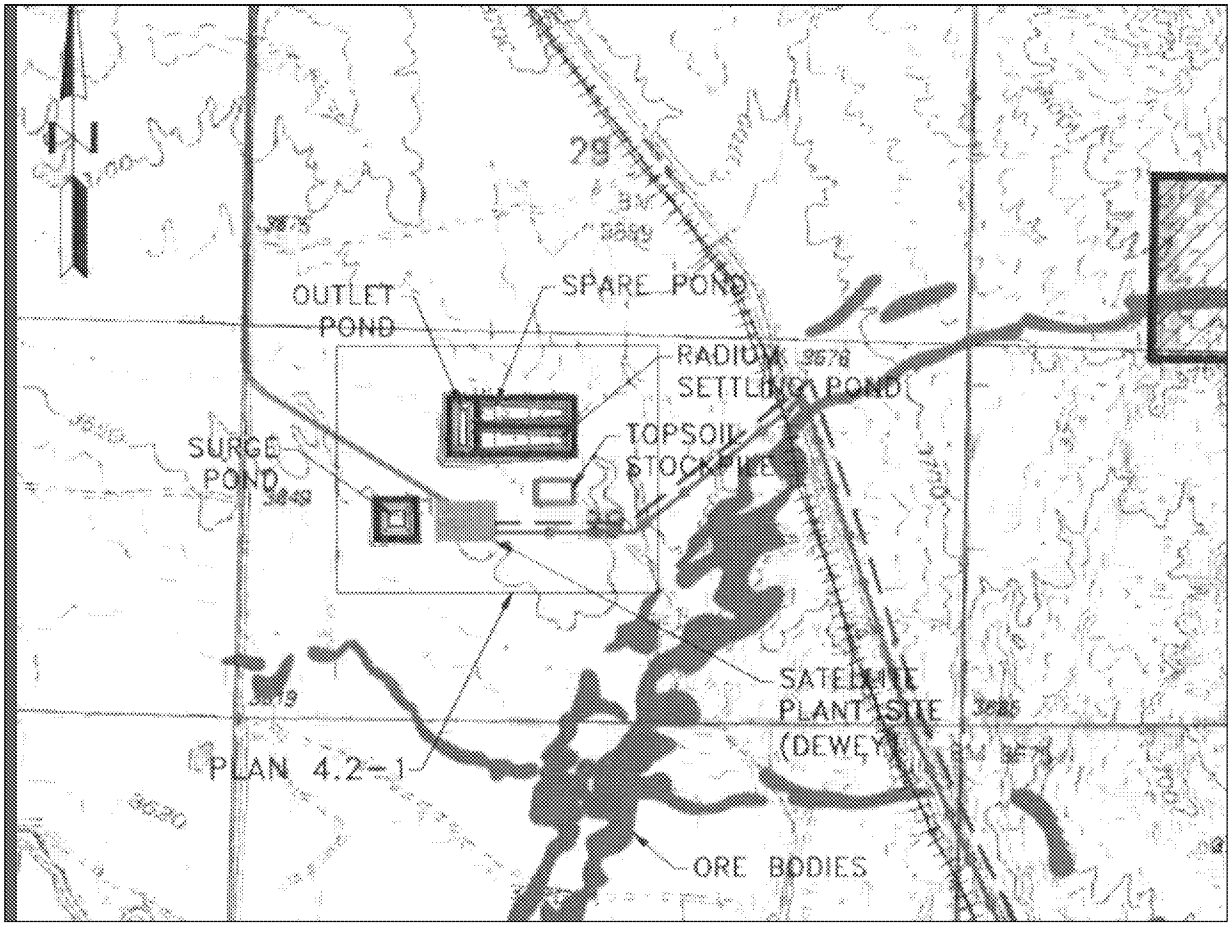
Dewey Area Figure 6.3 Site Surface Geology Class III Permit App The Dewey ponds lie on top of at least 400 feet of Graneros Group shale
(Belle Fourche, Mowry and Skull Creek Shales).

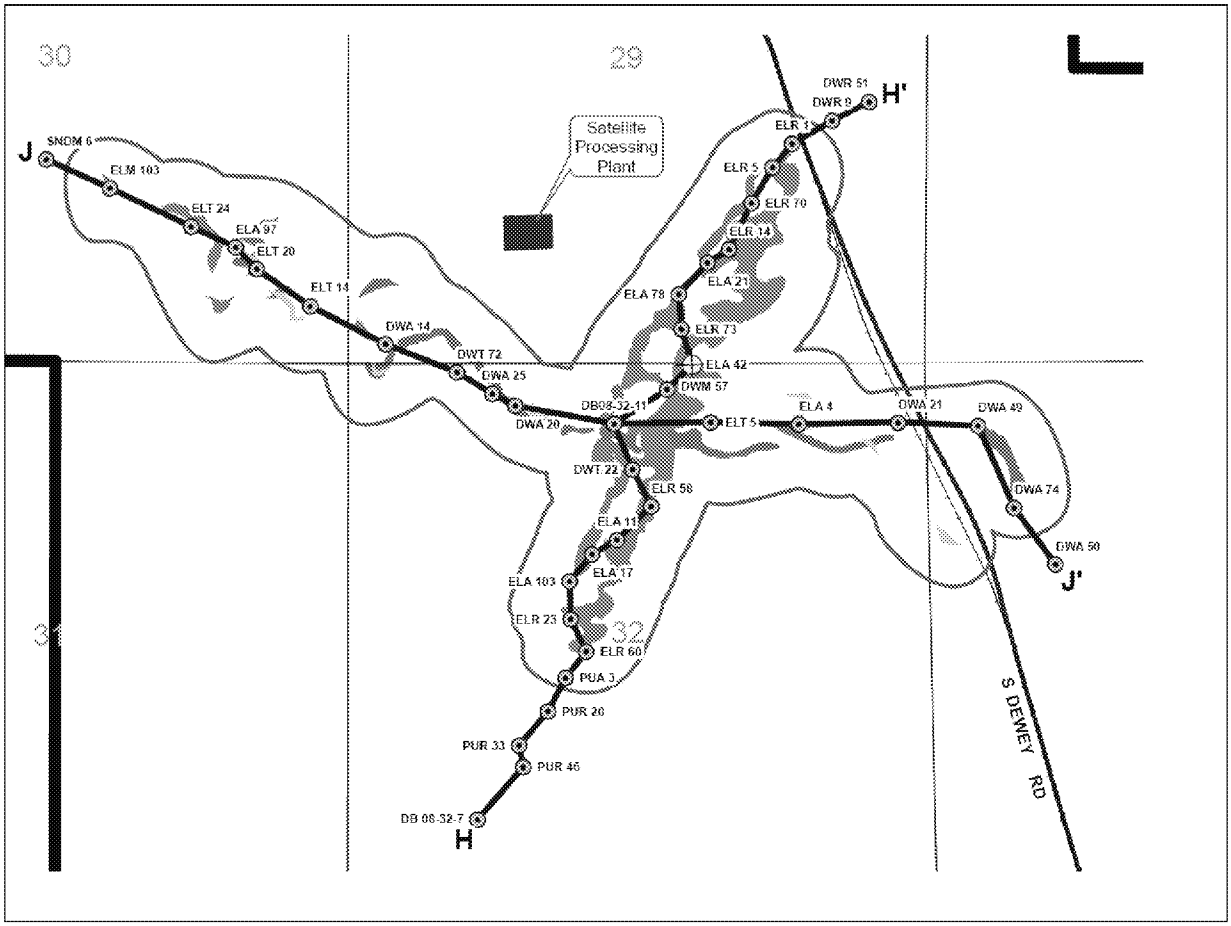


The Dewey ponds do not lie over any exploratory drill holes.

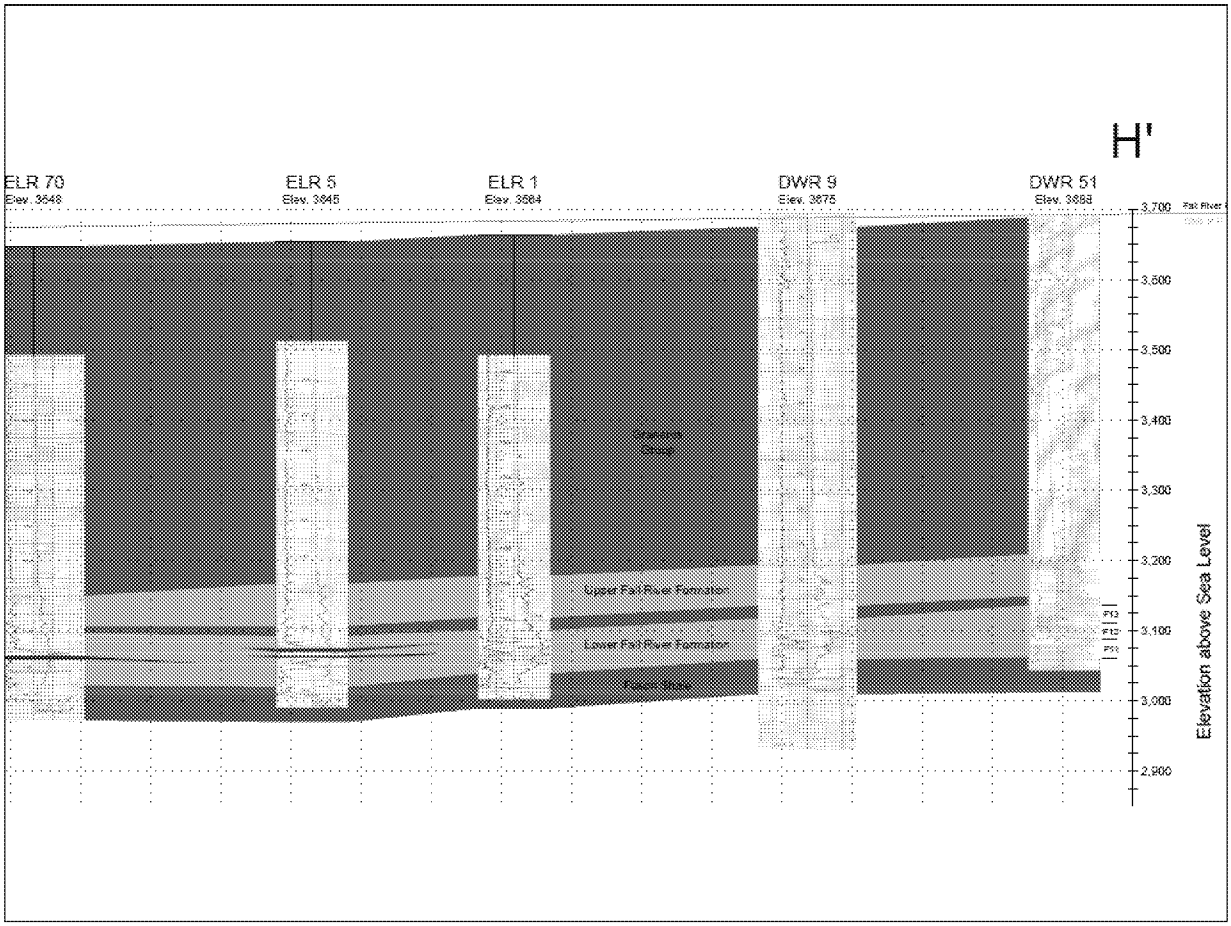


Dewey ponds: This slide has the different pond types labeled.


OUTLET POND
SPARE POND
RADIUM SETTLING POND
TOPSOIL STOCKPILE
SURGE POND
SATELLITE PLANT SITE (DEWEY)
PLAN 4.2-1
ORE BODIES



Dewey Area well fields and cross sections



Cross Section H-H' showing thickness of Graneros Group Shales in Dewey Area